

CLAIMS

What is claimed is:

1. A method for data recovery in a continuous data protection system, the system having a primary volume and a secondary volume, the method comprising the steps of:

- (a) selecting a snapshot of the primary volume to be recovered;
- (b) selecting a location on which the snapshot is to be loaded;
- (c) creating a point in time (PIT) map for the selected snapshot; and
- (d) loading the selected snapshot at the selected location.

2. The method according to claim 1, wherein step (a) includes selecting a scheduled snapshot.

3. The method according to claim 1, wherein step (a) includes selecting an any point in time (APIT) snapshot.

4. The method according to claim 3, further comprising the step of creating a delta map spanning the time between the time of the selected APIT snapshot and a time of a second delta map, the second delta map immediately preceding the selected APIT snapshot, the creating step being performed prior to step (c).

5. The method according to claim 4, wherein the created delta map includes changes made between the time of the selected APIT snapshot and the time of the second delta map.

6. The method according to claim 1, wherein step (b) includes selecting a logical unit on which the snapshot is to be loaded.

7. The method according to claim 1, wherein step (c) includes merging the created delta map with all delta maps earlier than the second delta map.

8. The method according to claim 7, wherein the merging step is optimized by using pre-merged delta maps.

9. The method according to claim 1, further comprising the step of:
(e) resolving a data block from the PIT map to determine which block on the secondary volume is presented as being part of the snapshot.

10. The method according to claim 9, further comprising the step of:
(f) accessing the snapshot via a host computer as if the snapshot was the primary volume at an earlier point in time, corresponding to the time of the selected snapshot.

11. The method according to claim 1, further comprising the step of:
controlling access to the loaded snapshot, wherein only authorized host computers can access the loaded snapshot.

12. A system for data recovery in a continuous data protection system, comprising:

a host computer;

a primary data volume;

a secondary data volume;

creating means for creating a snapshot of said primary data volume;

storing means for storing said snapshot on said secondary data volume;

selecting means for selecting a snapshot on said secondary data volume; and

accessing means for accessing said selected snapshot on said host computer.

13. The system according to claim 12, wherein said storing means includes a marker inserted into a write log on said secondary data volume.

14. The system according to claim 12, wherein said selecting means includes a graphical user interface.

15. The system according to claim 12, wherein said selecting means includes first selecting means for selecting a snapshot; and
second selecting means for selecting a logical unit for loading said selected snapshot.

16. The system according to claim 15, wherein said first selecting means includes selecting a scheduled snapshot.

17. The system according to claim 15, wherein said first selecting means includes selecting an any point in time (APIT) snapshot.

18. The system according to claim 17, further comprising:
second creating means for creating a delta map spanning the time between the time of said selected APIT snapshot and a time of a second delta map, said second delta map immediately preceding said selected APIT snapshot.

19. The system according to claim 18, wherein said created delta map includes changes made between the time of said selected APIT snapshot and the time of said second delta map.

20. The system according to claim 12, wherein said accessing means presents said selected snapshot to a user as if said selected snapshot were said primary data volume at an earlier point in time, corresponding to the time of said selected snapshot.

21. The system according to claim 12, further comprising:
controlling means for controlling access to said selected snapshot.
22. The system according to claim 21, wherein said controlling means permits
only authorized host computers to access said selected snapshot.